

Assensi Oliva

List of Publications by Year in descending order

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225
papers

5,363
citations

76196

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61
g-index

233
all docs

233
docs citations

233
times ranked

3507
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat transfer analysis and numerical simulation of a parabolic trough solar collector. Applied Energy, 2013, 111, 581-592.	5.1	218
2	Numerical simulation of a latent heat thermal energy storage system with enhanced heat conduction. Energy Conversion and Management, 1998, 39, 319-330.	4.4	152
3	Direct numerical simulations of two- and three-dimensional turbulent natural convection flows in a differentially heated cavity of aspect ratio 4. Journal of Fluid Mechanics, 2007, 586, 259-293.	1.4	136
4	Turbulent flow around a square cylinder at Reynolds number 22,000: A DNS study. Computers and Fluids, 2015, 123, 87-98.	1.3	132
5	Direct numerical simulation of the flow over a sphere at $Re = 3700$. Journal of Fluid Mechanics, 2011, 679, 263-287.	1.4	127
6	Three-dimensional numerical simulation of convection and radiation in a differentially heated cavity using the discrete ordinates method. International Journal of Heat and Mass Transfer, 2004, 47, 257-269.	2.5	114
7	Numerical investigation of the location of maximum erosive wear damage in elbow: Effect of slurry velocity, bend orientation and angle of elbow. Powder Technology, 2012, 217, 467-476.	2.1	106
8	Low-frequency unsteadiness in the vortex formation region of a circular cylinder. Physics of Fluids, 2013, 25, .	1.6	106
9	Parametric studies on automotive radiators. Applied Thermal Engineering, 2007, 27, 2033-2043.	3.0	92
10	A coupled volume-of-fluid/level-set method for simulation of two-phase flows on unstructured meshes. Computers and Fluids, 2016, 124, 12-29.	1.3	89
11	Verification of Finite Volume Computations on Steady-State Fluid Flow and Heat Transfer. Journal of Fluids Engineering, Transactions of the ASME, 2002, 124, 11-21.	0.8	87
12	Direct numerical simulation of a differentially heated cavity of aspect ratio 4 with Rayleigh numbers up to 1011 – Part I: Numerical methods and time-averaged flow. International Journal of Heat and Mass Transfer, 2010, 53, 665-673.	2.5	86
13	Symmetry-preserving discretization of Navier–Stokes equations on collocated unstructured grids. Journal of Computational Physics, 2014, 258, 246-267.	1.9	86
14	Multi-layered solid-PCM thermocline thermal storage concept for CSP plants. Numerical analysis and perspectives. Applied Energy, 2015, 142, 337-351.	5.1	81
15	Numerical Study of Plane and Round Impinging Jets using RANS Models. Numerical Heat Transfer, Part B: Fundamentals, 2008, 54, 213-237.	0.6	78
16	On the flow past a circular cylinder from critical to super-critical Reynolds numbers: Wake topology and vortex shedding. International Journal of Heat and Fluid Flow, 2015, 55, 91-103.	1.1	78
17	Unsteady forces on a circular cylinder at critical Reynolds numbers. Physics of Fluids, 2014, 26, .	1.6	77
18	Flow and turbulent structures around simplified car models. Computers and Fluids, 2014, 96, 122-135.	1.3	63

#	ARTICLE	IF	CITATIONS
19	Direct numerical simulation of a differentially heated cavity of aspect ratio 4 with Rayleigh numbers up to 10^6 Part II: Heat transfer and flow dynamics. International Journal of Heat and Mass Transfer, 2010, 53, 674-683.	2.5	61
20	Numerical simulation of wind flow around a parabolic trough solar collector. Applied Energy, 2013, 107, 426-437.	5.1	60
21	Numerical analysis of the thermal behaviour of glazed ventilated facades in Mediterranean climates. Part II: applications and analysis of results. Solar Energy, 2003, 75, 229-239.	2.9	59
22	Direct numerical simulation of a NACA0012 in full stall. International Journal of Heat and Fluid Flow, 2013, 43, 194-203.	1.1	59
23	Level-set simulations of buoyancy-driven motion of single and multiple bubbles. International Journal of Heat and Fluid Flow, 2015, 56, 91-107.	1.1	59
24	Building proper invariants for eddy-viscosity subgrid-scale models. Physics of Fluids, 2015, 27, .	1.6	59
25	DNS and RANS modelling of a turbulent plane impinging jet. International Journal of Heat and Mass Transfer, 2012, 55, 789-801.	2.5	58
26	Flamelet mathematical models for non-premixed laminar combustion. Combustion and Flame, 2009, 156, 334-347.	2.8	56
27	Conservation Properties of Unstructured Finite-Volume Mesh Schemes for the Navier-Stokes Equations. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 53-79.	0.6	55
28	Unsteady numerical simulation of the cooling process of vertical storage tanks under laminar natural convection. International Journal of Thermal Sciences, 2009, 48, 708-721.	2.6	54
29	A 3-D Volume-of-Fluid advection method based on cell-vertex velocities for unstructured meshes. Computers and Fluids, 2014, 94, 14-29.	1.3	53
30	Detailed thermodynamic characterization of hermetic reciprocating compressors. International Journal of Refrigeration, 2005, 28, 579-593.	1.8	52
31	Numerical simulation of capillary tube expansion devices behaviour with pure and mixed refrigerants considering metastable region. Part I: mathematical formulation and numerical model. Applied Thermal Engineering, 2002, 22, 173-182.	3.0	51
32	Numerical simulation and experimental validation of internal heat exchanger influence on CO2 trans-critical cycle performance. International Journal of Refrigeration, 2010, 33, 664-674.	1.8	51
33	Numerical simulation of capillary-tube expansion devices. International Journal of Refrigeration, 1995, 18, 113-122.	1.8	49
34	Two-phase flow distribution in multiple parallel tubes. International Journal of Thermal Sciences, 2010, 49, 909-921.	2.6	49
35	Direct numerical simulation of a fully developed turbulent square duct flow up to $Re = 10^5$. International Journal of Heat and Fluid Flow, 2015, 54, 258-267.	1.1	49
36	Numerical analysis of the thermal behaviour of ventilated glazed facades in Mediterranean climates. Part I: development and validation of a numerical model. Solar Energy, 2003, 75, 217-228.	2.9	47

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37	A multiple marker level-set method for simulation of deformable fluid particles. <i>International Journal of Multiphase Flow</i> , 2015, 74, 125-142.	1.6	44
38	Fixed-grid numerical modeling of melting and solidification using variable thermo-physical properties – Application to the melting of n-Octadecane inside a spherical capsule. <i>International Journal of Heat and Mass Transfer</i> , 2015, 86, 721-743.	2.5	43
39	Drain water heat recovery storage-type unit for residential housing. <i>Applied Thermal Engineering</i> , 2016, 103, 670-683.	3.0	42
40	Numerical experiments in turbulent natural and mixed convection in internal flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 1995, 5, 13-33.	1.6	41
41	Modular object-oriented methodology for the resolution of molten salt storage tanks for CSP plants. <i>Applied Energy</i> , 2013, 109, 402-414.	5.1	41
42	Flow dynamics in the turbulent wake of a sphere at sub-critical Reynolds numbers. <i>Computers and Fluids</i> , 2013, 80, 233-243.	1.3	41
43	Development of flat plate collector with plastic transparent insulation and low-cost overheating protection system. <i>Applied Energy</i> , 2014, 133, 206-223.	5.1	41
44	DIRECT NUMERICAL SIMULATION OF A THREE-DIMENSIONAL NATURAL-CONVECTION FLOW IN A DIFFERENTIALLY HEATED CAVITY OF ASPECT RATIO 4. <i>Numerical Heat Transfer; Part A: Applications</i> , 2004, 45, 649-673.	1.2	37
45	On the large-eddy simulations for the flow around aerodynamic profiles using unstructured grids. <i>Computers and Fluids</i> , 2013, 84, 176-189.	1.3	37
46	TermoFluids: A new Parallel unstructured CFD code for the simulation of turbulent industrial problems on low cost PC Cluster. <i>Lecture Notes in Computational Science and Engineering</i> , 2009, , 275-282.	0.1	36
47	Limits of the Oberbeck–Boussinesq approximation in a tall differentially heated cavity filled with water. <i>International Journal of Heat and Mass Transfer</i> , 2014, 68, 489-499.	2.5	36
48	Flow over a realistic car model: Wall modeled large eddy simulations assessment and unsteady effects. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 174, 225-240.	1.7	36
49	Implementation of two-equation soot flamelet models for laminar diffusion flames. <i>Combustion and Flame</i> , 2009, 156, 621-632.	2.8	35
50	PIBM: Particulate immersed boundary method for fluid–particle interaction problems. <i>Powder Technology</i> , 2015, 272, 1-13.	2.1	34
51	Parallel adaptive mesh refinement for large-eddy simulations of turbulent flows. <i>Computers and Fluids</i> , 2015, 110, 48-61.	1.3	34
52	Thermo-mechanical parametric analysis of packed-bed thermocline energy storage tanks. <i>Applied Energy</i> , 2016, 179, 1106-1122.	5.1	33
53	Three dimensionality in the wake of the flow around a circular cylinder at Reynolds number 5000. <i>Computers and Fluids</i> , 2017, 147, 102-118.	1.3	33
54	Numerical simulation and experimental validation of vapour compression refrigeration systems. Special emphasis on CO2 trans-critical cycles. <i>International Journal of Refrigeration</i> , 2005, 28, 1225-1237.	1.8	32

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55	Coupled radiation and natural convection: Different approaches of the slw model for a non-gray gas mixture. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2007, 107, 30-46.	1.1	32
56	A new subgrid characteristic length for turbulence simulations on anisotropic grids. <i>Physics of Fluids</i> , 2017, 29, 115109.	1.6	32
57	Numerical study of binary droplets collision in the main collision regimes. <i>Chemical Engineering Journal</i> , 2019, 370, 477-498.	6.6	32
58	Comparison of the performance of falling film and bubble absorbers for air-cooled absorption systems. <i>International Journal of Thermal Sciences</i> , 2009, 48, 1355-1366.	2.6	31
59	Parallel direct Poisson solver for discretisations with one Fourier diagonalisable direction. <i>Journal of Computational Physics</i> , 2011, 230, 4723-4741.	1.9	31
60	MPI-CUDA sparse matrix-vector multiplication for the conjugate gradient method with an approximate inverse preconditioner. <i>Computers and Fluids</i> , 2014, 92, 244-252.	1.3	31
61	Influence of rotation on the flow over a cylinder at $Re = 5000$. <i>International Journal of Heat and Fluid Flow</i> , 2015, 55, 76-90.	1.1	31
62	Analysis and design of a drain water heat recovery storage unit based on PCM plates. <i>Applied Energy</i> , 2016, 179, 1006-1019.	5.1	31
63	Numerical simulation of solar collectors: The effect of nonuniform and nonsteady state of the boundary conditions. <i>Solar Energy</i> , 1991, 47, 359-373.	2.9	30
64	Numerical simulation of capillary-tube expansion devices behaviour with pure and mixed refrigerants considering metastable region. Part II: experimental validation and parametric studies. <i>Applied Thermal Engineering</i> , 2002, 22, 379-391.	3.0	30
65	A level-set model for mass transfer in bubbly flows. <i>International Journal of Heat and Mass Transfer</i> , 2019, 138, 335-356.	2.5	30
66	Numerical simulation of solid-liquid phase change phenomena. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1991, 91, 1123-1134.	3.4	29
67	A level-set model for thermocapillary motion of deformable fluid particles. <i>International Journal of Heat and Fluid Flow</i> , 2016, 62, 324-343.	1.1	29
68	A parallel radial basis function interpolation method for unstructured dynamic meshes. <i>Computers and Fluids</i> , 2013, 80, 44-54.	1.3	27
69	Effect of collisions on the particle behavior in a turbulent square duct flow. <i>Powder Technology</i> , 2015, 269, 320-336.	2.1	27
70	Direct numerical simulation of backward-facing step flow at and expansion ratio 2. <i>Journal of Fluid Mechanics</i> , 2019, 863, 341-363.	1.4	27
71	Modelling of the heat exchangers of a small capacity, hot water driven, air-cooled H_2O -LiBr absorption cooling machine. <i>International Journal of Refrigeration</i> , 2008, 31, 75-86.	1.8	25
72	Object-oriented simulation of reciprocating compressors: Numerical verification and experimental comparison. <i>International Journal of Refrigeration</i> , 2011, 34, 1989-1998.	1.8	25

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73	Wind speed effect on the flow field and heat transfer around a parabolic trough solar collector. Applied Energy, 2014, 130, 200-211.	5.1	25
74	Numerical study of droplet deformation in shear flow using a conservative level-set method. Chemical Engineering Science, 2019, 207, 153-171.	1.9	25
75	Analysis of different RANS models applied to turbulent forced convection. International Journal of Heat and Mass Transfer, 2007, 50, 3749-3766.	2.5	24
76	Parameter-free symmetry-preserving regularization modeling of a turbulent differentially heated cavity. Computers and Fluids, 2010, 39, 1815-1831.	1.3	24
77	Numerical resolution of the liquid-vapour two-phase flow by means of the two-fluid model and a pressure based method. International Journal of Multiphase Flow, 2012, 43, 118-130.	1.6	24
78	A parallel MPI+OpenMP+OpenCL algorithm for hybrid supercomputations of incompressible flows. Computers and Fluids, 2013, 88, 764-772.	1.3	24
79	A simple approach to discretize the viscous term with spatially varying (eddy-)viscosity. Journal of Computational Physics, 2013, 253, 405-417.	1.9	24
80	THREE-DIMENSIONAL NUMERICAL STUDY OF MELTING INSIDE AN ISOTHERMAL HORIZONTAL CYLINDER. Numerical Heat Transfer; Part A: Applications, 1997, 32, 531-553.	1.2	23
81	Parametric Study of Two-tank TES Systems for CSP Plants. Energy Procedia, 2015, 69, 1049-1058.	1.8	23
82	On the evolution of flow topology in turbulent Rayleigh-Bénard convection. Physics of Fluids, 2016, 28, .	1.6	23
83	On the feasibility of affordable high-fidelity CFD simulations for indoor environment design and control. Building and Environment, 2020, 184, 107144.	3.0	22
84	A DIRECT PARALLEL ALGORITHM FOR THE EFFICIENT SOLUTION OF THE PRESSURE-CORRECTION EQUATION OF INCOMPRESSIBLE FLOW PROBLEMS USING LOOSELY COUPLED COMPUTERS. Numerical Heat Transfer, Part B: Fundamentals, 2002, 41, 117-138.	0.6	21
85	A scalable parallel Poisson solver for three-dimensional problems with one periodic direction. Computers and Fluids, 2010, 39, 525-538.	1.3	21
86	Large eddy and direct numerical simulations of a turbulent water-filled differentially heated cavity of aspect ratio 5. International Journal of Heat and Mass Transfer, 2014, 77, 1084-1094.	2.5	21
87	DNS of the wall effect on the motion of bubble swarms. Procedia Computer Science, 2017, 108, 2008-2017.	1.2	21
88	Parametric studies on hermetic reciprocating compressors. International Journal of Refrigeration, 2005, 28, 253-266.	1.8	20
89	Analysis of the flamelet concept in the numerical simulation of laminar partially premixed flames. Combustion and Flame, 2008, 113, 71-83.	2.8	20
90	Fixed-Grid Modeling of Solid-Liquid Phase Change in Unstructured Meshes Using Explicit Time Schemes. Numerical Heat Transfer, Part B: Fundamentals, 2014, 65, 27-52.	0.6	20

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91	Parallel load balancing strategy for Volume-of-Fluid methods on 3-D unstructured meshes. Journal of Computational Physics, 2015, 282, 269-288.	1.9	20
92	Numerical and experimental investigation of a vertical LiBr falling film absorber considering wave regimes and in presence of mist flow. International Journal of Thermal Sciences, 2016, 109, 342-361.	2.6	20
93	Heat and moisture insulation by means of air curtains: Application to refrigerated chambers. International Journal of Refrigeration, 2016, 68, 1-14.	1.8	20
94	Efficient CFD code implementation for the ARM-based Mont-Blanc architecture. Future Generation Computer Systems, 2018, 79, 786-796.	4.9	20
95	Numerical study of rising bubbles with path instability using conservative level-set and adaptive mesh refinement. Computers and Fluids, 2019, 187, 83-97.	1.3	20
96	A direct Schur-Fourier decomposition for the efficient solution of high-order Poisson equations on loosely coupled parallel computers. Numerical Linear Algebra With Applications, 2006, 13, 303-326.	0.9	19
97	Thermal and Fluid Dynamic Simulation of Automotive Fin-and-Tube Heat Exchangers, Part 1: Mathematical Model. Heat Transfer Engineering, 2008, 29, 484-494.	1.2	19
98	Development and comparison of different spatial numerical schemes for the radiative transfer equation resolution using three-dimensional unstructured meshes. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 264-273.	1.1	19
99	Improved semi-analytical method for air curtains prediction. Energy and Buildings, 2013, 66, 258-266.	3.1	19
100	On the CFD&HT of the Flow around a Parabolic Trough Solar Collector under Real Working Conditions. Energy Procedia, 2014, 49, 1379-1390.	1.8	19
101	Analysis of Different Numerical Schemes for the Resolution of Convection-Diffusion Equations using Finite-Volume Methods on Three-Dimensional Unstructured Grids. Part I: Discretization Schemes. Numerical Heat Transfer, Part B: Fundamentals, 2006, 49, 333-350.	0.6	18
102	Hybrid MPI+OpenMP parallelization of an FFT-based 3D Poisson solver with one periodic direction. Computers and Fluids, 2011, 49, 101-109.	1.3	18
103	Particulate Immersed Boundary Method for complex fluid-particle interaction problems with heat transfer. Computers and Mathematics With Applications, 2016, 71, 391-407.	1.4	18
104	A semi-implicit coupling technique for fluid-structure interaction problems with strong added-mass effect. Journal of Fluids and Structures, 2018, 80, 94-112.	1.5	18
105	Assessment of the symmetry-preserving regularization model on complex flows using unstructured grids. Computers and Fluids, 2012, 60, 108-116.	1.3	17
106	DNS and regularization modeling of a turbulent differentially heated cavity of aspect ratio 5. International Journal of Heat and Mass Transfer, 2013, 57, 171-182.	2.5	17
107	<i>A priori</i> study of subgrid-scale features in turbulent Rayleigh-Bénard convection. Physics of Fluids, 2017, 29, .	1.6	17
108	A new optimisation methodology used to study the effect of cover properties on night-time greenhouse climate. Biosystems Engineering, 2013, 116, 130-143.	1.9	16

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109	Three dimensional heat transfer analysis of combined conduction and radiation in honeycomb transparent insulation. <i>Solar Energy</i> , 2014, 105, 58-70.	2.9	16
110	LES-based Study of the Roughness Effects on the Wake of a Circular Cylinder from Subcritical to Transcritical Reynolds Numbers. <i>Flow, Turbulence and Combustion</i> , 2017, 99, 729-763.	1.4	16
111	Natural Convection in a Large, Inclined Channel With Asymmetric Heating and Surface Radiation. <i>Journal of Heat Transfer</i> , 2003, 125, 812-820.	1.2	15
112	A DIRECT SCHUR-FOURIER DECOMPOSITION FOR THE SOLUTION OF THE THREE-DIMENSIONAL POISSON EQUATION OF INCOMPRESSIBLE FLOW PROBLEMS USING LOOSELY COUPLED PARALLEL COMPUTERS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2003, 43, 467-488.	0.6	15
113	Numerical Experiments in Turbulent Natural Convection Using Two-Equation Eddy-Viscosity Models. <i>Journal of Heat Transfer</i> , 2008, 130, .	1.2	14
114	Detailed numerical simulation of laminar flames by a parallel multiblock algorithm using loosely coupled computers. <i>Combustion Theory and Modelling</i> , 2003, 7, 525-544.	1.0	14
115	Thermal and fluidâ€œdynamic behaviour of doubleâ€œpipe condensers and evaporatorsâ€œ”a numerical study. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 1995, 5, 781-795.	1.6	13
116	Analysis of the Dynamic Behavior of Refrigerated Spaces Using Air Curtains. <i>Numerical Heat Transfer; Part A: Applications</i> , 2009, 55, 553-573.	1.2	13
117	A numerical study of liquid atomization regimes by means of conservative level-set simulations. <i>Computers and Fluids</i> , 2019, 179, 137-149.	1.3	13
118	Thermal and Fluid Dynamic Simulation of Automotive Fin-and-Tube Heat Exchangers, Part 2: Experimental Comparison. <i>Heat Transfer Engineering</i> , 2008, 29, 495-502.	1.2	12
119	Numerical Study of the Transient Cooling Process of Water Storage Tanks under Heat Losses to the Environment. <i>Numerical Heat Transfer; Part A: Applications</i> , 2009, 55, 1051-1074.	1.2	12
120	Analysis of wall-function approaches using two-equation turbulence models. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 4940-4957.	2.5	11
121	Dynamic Thermoelastic Analysis of Thermocline-like Storage Tanks. <i>Energy Procedia</i> , 2015, 69, 850-859.	1.8	11
122	Large Eddy Simulation of a Turbulent Diffusion Flame: Some Aspects of Subgrid Modelling Consistency. <i>Flow, Turbulence and Combustion</i> , 2017, 99, 209-238.	1.4	11
123	Energy and exergy analysis of an absorption system with working pairs LiBr-H ₂ O and Carrol-H ₂ O at applications of cooling and heating. <i>International Journal of Refrigeration</i> , 2021, 132, 156-171.	1.8	11
124	Flow topology dynamics in a three-dimensional phase space for turbulent Rayleigh-BÃ©nard convection. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	11
125	Evaluation of a Small Capacity, Hot Water Driven, Air-Cooled H ₂ O-LiBr Absorption Machine. <i>HVAC and R Research</i> , 2007, 13, 59-75.	0.9	10
126	Optimising the Termofluids CFD code for petascale simulations. <i>International Journal of Computational Fluid Dynamics</i> , 2016, 30, 425-430.	0.5	10

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127	Portable implementation model for CFD simulations. Application to hybrid CPU/GPU supercomputers. International Journal of Computational Fluid Dynamics, 2017, 31, 396-411.	0.5	10
128	DNS of Mass Transfer from Bubbles Rising in a Vertical Channel. Lecture Notes in Computer Science, 2019, , 596-610.	1.0	10
129	Analysis of Different Numerical Schemes for the Resolution of Convection-Diffusion Equations using Finite-Volume Methods on Three-Dimensional Unstructured Grids. Part II: Numerical Analysis. Numerical Heat Transfer, Part B: Fundamentals, 2006, 49, 351-375.	0.6	9
130	Numerical simulation of dehumidifying fin-and-tube heat exchangers: Semi-analytical modelling and experimental comparison. International Journal of Refrigeration, 2007, 30, 1266-1277.	1.8	9
131	Effect of contaminant properties and temperature gradients on the efficiency of transient gaseous contaminant removal from an enclosure : a numerical study. International Journal of Heat and Mass Transfer, 1998, 41, 3589-3609.	2.5	8
132	Unsteady natural convection cooling of a water storage tank with an internal gas flue. International Journal of Thermal Sciences, 2010, 49, 36-47.	2.6	8
133	DNS of falling droplets in a vertical channel. International Journal of Computational Methods and Experimental Measurements, 2017, 6, 398-410.	0.1	8
134	Modeling and Numerical Simulation of the Thermal and Fluid Dynamic Behavior of Hermetic Reciprocating Compressorsâ€™Part 1: Theoretical Basis. HVAC and R Research, 2003, 9, 215-235.	0.9	7
135	A low-dissipation convection scheme for the stable discretization of turbulent interfacial flow. Computers and Fluids, 2017, 153, 102-117.	1.3	7
136	A second-order time accurate semi-implicit method for fluidâ€™structure interaction problems. Journal of Fluids and Structures, 2019, 86, 135-155.	1.5	7
137	Tetrahedral adaptive mesh refinement for twoâ€™phase flows using conservative levelâ€™set method. International Journal for Numerical Methods in Fluids, 2021, 93, 481-503.	0.9	7
138	Numerical Simulations of Thermal Energy Storage Systems with Phase Change Materials. , 2011, , .		7
139	Heat transfer simulation in vertical cylindrical enclosures for supercritical Rayleigh number and arbitrary side-wall conductivity. International Journal of Heat and Mass Transfer, 1999, 42, 323-343.	2.5	6
140	Modeling and Numerical Simulation of the Thermal and Fluid Dynamic Behavior of Hermetic Reciprocating Compressorsâ€™Part 2: Experimental Investigation. HVAC and R Research, 2003, 9, 237-249.	0.9	6
141	An OpenCL-based Parallel CFD Code for Simulations on Hybrid Systems with Massively-parallel Accelerators. Procedia Engineering, 2013, 61, 81-86.	1.2	6
142	Direct Numerical Simulation of Incompressible Flows on Unstructured Meshes Using Hybrid CPU/GPU Supercomputers. Procedia Engineering, 2013, 61, 87-93.	1.2	6
143	Advanced CFD&HT Numerical Modeling of Solar Tower Receivers. Energy Procedia, 2014, 49, 50-59.	1.8	6
144	Numerical simulation of non-adiabatic capillary tubes. Special emphasis on the near-saturation zone. International Journal of Refrigeration, 2015, 55, 153-167.	1.8	6

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145	Numerical simulation of roughness effects on the flow past a circular cylinder. Journal of Physics: Conference Series, 2016, 745, 032043.	0.3	6
146	A level-set aided single-phase model for the numerical simulation of free-surface flow on unstructured meshes. Computers and Fluids, 2016, 140, 97-110.	1.3	6
147	DNS of Drag-Force and Reactive Mass Transfer in Gravity-Driven Bubbly Flows. ERCOFTAC Series, 2020, , 119-125.	0.1	6
148	A CFD-based surrogate model for predicting flow parameters in a ventilated room using sensor readings. Energy and Buildings, 2022, 266, 112146.	3.1	6
149	Numerical experiments on laminar natural convection in rectangular cavities with and without honeycomb structures. International Journal of Numerical Methods for Heat and Fluid Flow, 1995, 5, 423-443.	1.6	5
150	Multidimensional and Unsteady Simulation of Fin-and-Tube Heat Exchangers. Numerical Heat Transfer; Part A: Applications, 2009, 56, 193-210.	1.2	5
151	New subgrid-scale models for large-eddy simulation of Rayleigh-Bénard convection. Journal of Physics: Conference Series, 2016, 745, 032041.	0.3	5
152	A level-set method for thermal motion of bubbles and droplets. Journal of Physics: Conference Series, 2016, 745, 032113.	0.3	5
153	A fluid-structure interaction solver for the fluid flow through reed type valves. IOP Conference Series: Materials Science and Engineering, 2017, 232, 012032.	0.3	5
154	Direct Numerical Simulations and Symmetry-Preserving Regularization Simulations of the flow around a circular cylinder at Reynolds number 3900. , 2009, , .		5
155	Numerical and Experimental Study of a Flat Plate Solar Collector with Transparent Insulation and Overheating Protection System. , 2011, , .		5
156	Analysis of the heat transfer and friction factor correlations influence in the prediction of evaporating flows inside tubes. International Journal of Refrigeration, 2009, 32, 1744-1755.	1.8	4
157	Modelling of fin-and-tube evaporators considering non-uniform in-tube heat transfer. International Journal of Thermal Sciences, 2010, 49, 692-701.	2.6	4
158	Verification of Multidimensional and Transient CFD Solutions. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 46-73.	0.6	4
159	Low-frequency variations in the wake of a circular cylinder at $Re = 3900$. Journal of Physics: Conference Series, 2011, 318, 042038.	0.3	4
160	Numerical Analysis of the Transpose Diffusive Term for Viscoplastic-Type Non-Newtonian Fluid Flows Using a Collocated Variable Arrangement. Numerical Heat Transfer, Part B: Fundamentals, 2015, 67, 410-436.	0.6	4
161	Numerical analysis of conservative unstructured discretisations for low Mach flows. International Journal for Numerical Methods in Fluids, 2017, 84, 309-334.	0.9	4
162	A time-average filtering technique to improve the efficiency of two-layer wall models for large eddy simulation in complex geometries. Computers and Fluids, 2019, 188, 44-59.	1.3	4

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163	New Strategies for Mitigating the Gray Area in Delayed-Detached Eddy Simulation Models. AIAA Journal, 2021, 59, 3331-3345.	1.5	4
164	DNS of Unequal Size Droplets Collision Using a Moving-Mesh/Level-Set Method. ERCOFTAC Series, 2020, , 103-109.	0.1	4
165	A novel Sigma-ADC application oriented to test hermetic reciprocating compressors. Measurement Science and Technology, 2004, 15, 2207-2214.	1.4	3
166	Numerical simulation of turbulence at lower costs: Regularization modeling. Computers and Fluids, 2013, 80, 251-259.	1.3	3
167	Thermal Analysis of a Receiver for Linear Fresnel Reflectors. Energy Procedia, 2015, 69, 405-414.	1.8	3
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